

AMENDMENTS TO THE CLAIMS

Claims 1 to 9 (Canceled).

10. (Currently Amended) ~~A self-oscillating~~ An audio Class D amplifier, comprising
- (a) a detector for receiving a PWM waveform control signal and producing a digital waveform switching signal to activate one of a pair including a positive switch and a negative switch to correct gain produced by the Class D amplifier;
 - (b) an output stage including a positive switch and a negative switch comprising a single switching output, said output stage receiving said switching signal and activating one of said switches to produce a variable switching non-continuous digital driving signal;
 - (c) an output filter to receive said digital driving signal, remove switching noise and provide an amplified non-inverting audio analog output signal to drive a load;
 - (d) a non-inverting, closed loop negative feedback error amplifier circuit to
 - (i) receive said amplified analog output signal and compare said output signal to said input signal for gain-correction purposes, and
 - (ii) produce said PWM waveform control signal;

said amplifier self-oscillating.

11. (Currently Amended) ~~A self-oscillating~~ An audio Class D amplifier, comprising

- (a) a detector for receiving a PWM waveform control signal and producing a digital

1 waveform switching signal to activate one of a pair including a positive switch and
2 a negative switch to correct gain produced by the Class D amplifier;
3 (b) an output stage including a positive switch and a negative switch comprising a
4 single switching output, said output stage receiving said switching signal and
5 activating one of said switches to produce a variable switching non-continuous
6 digital driving signal;
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8 (c) an output filter to receive said digital driving signal, remove switching noise and
9 provide an amplified non-inverting audio analog output signal to drive a load;
10 (d) a non-inverting, *closed loop* negative feedback error amplifier circuit to
11 (i) receive said amplified analog output signal and compare said output signal
12 to said input signal for gain-correction purposes, and
13 (ii) produce said PWM waveform control signal;
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15 the operation of said amplifier slowing as the magnitude of the error in gain increases, said
16 amplifier self-oscillating.

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18 12. (Currently Amended) ~~A self-oscillating~~ An audio Class D amplifier, comprising

19 (a) a variable frequency zero crossing detector for receiving a PWM waveform control
20 signal and producing a digital waveform switching signal to activate one of a pair
21 including a positive switch and a negative switch to correct gain produced by the
22 Class D amplifier;
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24 (b) an output stage including a positive switch and a negative switch comprising a
25 single switching output, said output stage receiving said switching signal and
26 activating one of said switches to produce a variable switching non-continuous
27 digital driving signal;
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1 (c) an output filter to receive said digital driving signal, remove switching noise and
2 provide an amplified non-inverting audio analog output signal to drive a load;
3 (d) a non-inverting, closed loop negative feedback, error amplifier circuit to
4 (i) receive said amplified analog output signal and compare said output signal
5 to said input signal for gain-correction purposes, and
6 (ii) produce said PWM waveform control signal;
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8 the operation of said amplifier slowing as the magnitude of the error in gain increases, said
9 amplifier self-oscillating.
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